

What is claimed is

1. An aqueous solution of H_2O_2 (hydrogen peroxide) that dispensed by a consumer as a stable foam for the treatment of minor injuries comprising

- 5 a) a 0.1% to 15% solution of H_2O_2 ;
 b) about 1% of a surfactant;
 c) less than 1% of a stabilizer,

packaged in a container equipped with a pump foaming chamber that produces

- 10 foam without the use of gas propellants and delivers H_2O_2 topically to a wound by finger-depression of a foam dispenser.

2. The foam of claim 1 wherein the surfactant is a non-ionic surfactant selected from the group consisting of octylol 9, laneth-4, steareth-4, oleth-4, ceteth-10,
15 laneth-10, steareth-10, oleth-10, ceteth-20, polysorbates 20 and 80, and combinations thereof.

3. The foam of claim 1 wherein the stabilizer is sodium pyrophosphate.

- 20 4. The foam of claim 1 wherein the H_2O_2 is optionally formulated with at least one complementary ingredient selected from the group consisting of topical pain relievers and skin protectants.

5. The foam of claim 4 wherein the topical pain relievers are selected from the
25 group consisting of benzocaine, butamben picrate, dibucaine hydrochloride, dimethisoquin hydrochloride, dyclonine hydrochloride, lidocaine, lidocaine hydrochloride, pramoxine hydrochloride, tetracaine, tetracaine hydrochloride, benzyl alcohol, camphor, camphorated metacresol, juniper, menthol, phenol, phenolate sodium, resorcinol, diphenhydramine hydrochloride, tripelenamine
30 hydrochloride, hydrocortisone, hydrocortisone acetate, methyl salicylate, menthol, methyl nicotinate, capsaicin, capsaicin oleoresin and combinations

thereof.

6. The foam of claim 4 wherein the skin protectants are selected from the group consisting of glycerin, propylene glycol, dimethicone, allantoin, aluminum
5 hydroxide gel, calamine, cocoa butter, kaolin, petrolatum, shark liver oil, zinc acetate, zinc carbonate, zinc oxide, cod liver oil, lanolin, mineral oil, talc, topical starch, colloidal oatmeal, and sodium bicarbonate.
7. The foam of claim 1 wherein the H_2O_2 is applied to the wound without the
10 need for additional application means.
8. The foam of claim 1 wherein the H_2O_2 foam dispensing device comprises a reversibly compressible and decompressible container housing which operates at atmospheric pressure.
- 15 9. An aqueous solution of H_2O_2 (hydrogen peroxide) that is dispensed by a consumer as a spray mist for the treatment of minor injuries comprising
- a) a 0.1% to 15% solution of H_2O_2 ;
 - b) less than 1% of sodium pyrophosphate stabilizer;
- 20 packaged in a container equipped with a sprayer that ejects a fine mist of H_2O_2 topically to a wound.
10. The solution of claim 9 wherein the H_2O_2 is optionally formulated with at least one complementary ingredient selected from the group consisting of topical pain
25 relievers and skin protectants.
11. The solution of claim 9 wherein the local anesthetics are selected from the group consisting of benzocaine, butamben picrate, dibucaine hydrochloride, dimethisoquin hydrochloride, dydonine hydrochloride, lidocaine, lidocaine
30 hydrochloride, pramoxine hydrochloride, tetracaine, tetracaine hydrochloride, benzyl alcohol, camphor, camphorated metacresol, juniper, menthol, phenol,

phenolate sodium, resorcinol, diphenhydramine hydrochloride, tripelenamine hydrochloride, hydrocortisone, hydrocortisone acetate, methyl salicylate, menthol, methyl nicotinate, capsaicin, capsaicin oleoresin and combinations thereof.

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12. The solution of claim 9 wherein the skin protectants are selected from the group consisting of glycerin, propylene glycol, dimethicone, allantoin, aluminum hydroxide gel, calamine, cocoa butter, kaolin, petrolatum, shark liver oil, zinc acetate, zinc carbonate, zinc oxide, cod liver oil, lanolin, mineral oil, talc, topical starch, colloidal oatmeal, and sodium bicarbonate.

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13. The solution of claim 9 wherein the H_2O_2 is applied to the wound without the need for additional application means.

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14. A disposable towelette that is saturated with an aqueous solution of H_2O_2 (hydrogen peroxide) that is packaged in a disposable wrapper, said solution comprising

a) a 0.1% to 15% solution of H_2O_2 antiseptic;

b) less than 1% of sodium pyrophosphate stabilizer;

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that enables antiseptic application of H_2O_2 to a topical wound without additional applicator means.

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15. The disposable towelette of claim 14 wherein the H_2O_2 is optionally formulated with at least one complementary ingredient selected from the group consisting of topical pain relievers and skin protectants.

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16. The disposable towelette of claim 14 wherein the topical pain relievers are selected from the group consisting of benzocaine, butamben picrate, dibucaine hydrochloride, dimethisoquin hydrochloride, dyclonine hydrochloride, lidocaine, lidocaine hydrochloride, pramoxine hydrochloride, tetracaine, tetracaine hydrochloride, benzyl alcohol, camphor, camphorated metacresol, juniper,

menthol, phenol, phenolate sodium, resorcinol, diphenhydramine hydrochloride, tripelenamine hydrochloride, hydrocortisone, hydrocortisone acetate, methyl salicylate, menthol, methyl nicotinate, capsaicin, capsaicin oleoresin and combinations thereof.

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17. The disposable towelette of claim 14 wherein the skin protectants are selected from the group consisting of glycerin, propylene glycol, dimethicone, allantoin, aluminum hydroxide gel, calamine, cocoa butter, kaolin, petrolatum, shark liver oil, zinc acetate, zinc carbonate, zinc oxide, cod liver oil, lanolin,
10 mineral oil, talc, topical starch, colloidal oatmeal, and sodium bicarbonate.

18. The disposable towelette of claim 14 wherein said towelette is made of a material that is not reactive with H_2O_2 selected from the group consisting of cellulosic tissue, rayon/polyester blends, silicone carbonates, polypropylene,
15 polyethylene, silk fibers, keratin fibers and cellulosic fibers.

19. An antiseptic gel composition of H_2O_2 (hydrogen peroxide) that comprises
a) a 0.1% to 15% solution of H_2O_2 antiseptic;
b) about 2% hypromellose thickener;
20 c) about 0.25% sodium pyrophosphate stabilizer;
d) about 0.05% 2-amino-2-methyl-1-propanol neutralizing agent and
the balance propylene glycol formulated into a stable gel composition that is dispensed by a consumer as needed for the treatment of minor injuries.

25 20. The gel of claim 19 wherein the H_2O_2 is optionally formulated with at least one complementary ingredient selected from the group consisting of topical pain relievers and skin protectants.

30 21. The gel of claim 19 wherein the topical pain relievers are selected from the group consisting of benzocaine, butamben picrate, dibucaine hydrochloride, dimethisoquin hydrochloride, dydonine hydrochloride, lidocaine, lidocaine

hydrochloride, pramoxine hydrochloride, tetracaine, tetracaine hydrochloride, benzyl alcohol, camphor, camphorated metacresol, juniper, menthol, phenol, phenolate sodium, resorcinol, diphenhydramine hydrochloride, tripelenamine hydrochloride, hydrocortisone, hydrocortisone acetate, methyl salicylate, 5 menthol, methyl nicotinate, capsaicin, capsaicin oleoresin and combinations thereof.

22. The gel of claim 19 wherein the skin protectants are selected from the group consisting of glycerin, propylene glycol, dimethicone, allantoin, aluminum 10 hydroxide gel, calamine, cocoa butter, kaolin, petrolatum, shark liver oil, zinc acetate, zinc carbonate, zinc oxide, cod liver oil, lanolin, mineral oil, talc, topical starch, colloidal oatmeal, and sodium bicarbonate.

23. The gel of claim 19 wherein the H_2O_2 contained therein is applied to the 15 wound without the need for application means.

24. A method for treating topical wounds with a composition of hydrogen peroxide (H_2O_2) which comprises applying a foam composition comprising from 0.1 to 15% hydrogen peroxide, 20 stabilized with minor amounts of sodium pyrophosphate and formulated with a surfactant to the wound site by depressing a finger-activated pump foaming device in the immediate vicinity of said wound allowing the peroxide to come into contact with the wound without the need for 25 additional application means and allowing the peroxide to treat the wound without dripping.

25. A method for treating topical wounds with a composition of hydrogen peroxide (H_2O_2) which comprises 30 spraying a composition comprising from 0.1 to 15% hydrogen peroxide, stabilized with minor amounts of sodium pyrophosphate, and disinfecting the wound by

spraying as needed, said spraying
allowing the peroxide to come into contact with the wound without the need for
additional application means and
allowing the peroxide to treat the wound without dripping.

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26. A method for treating topical wounds with a composition of hydrogen
peroxide (H_2O_2) which comprises
opening a sealed packet of a disposable towelette that is saturated with from 0.1
to 15% hydrogen peroxide, stabilized with minor amounts of sodium

- 10 pyrophosphate, opening the sealed packet, disinfecting the wound by wiping it
with the towelette, repeating the wiping as needed to treat the wound, disposing
of the used towelette and its packaging,
allowing the peroxide to come into contact with the wound without the need for
additional application means and
15 allowing the peroxide to treat the wound without dripping.

27. A method for treating topical wounds with a composition of hydrogen
peroxide (H_2O_2) by applying to a wound site a gel which comprises

- a) a 0.1% to 15% solution of H_2O_2 antiseptic;
20 b) about 2% hypromellose thickener;
c) about 0.25% sodium pyrophosphate stabilizer;
d) about 0.05% 2-amino-2-methyl-1-propanol neutralizing agent and
the balance propylene glycol formulated onto the site of a topical wound by
opening a tube which contains said gel, squeezing the tube, and applying the gel
25 to the site of the wound,
allowing the peroxide to come into contact with the wound without the need for
additional application means and
allowing the peroxide to treat the wound without dripping.